

WHAT IS CLAIMED IS:

1. A method for administering a drug to a patient, the method comprising:  
coupling a valve system to the patient's airway, wherein the valve system is  
configured to prevent or impede respiratory gases from flowing into the lungs for at least  
some time such that the intrathoracic pressure is less than atmospheric pressure;  
introducing a drug into the patient;  
lowering the intrathoracic pressure using the valve system to cause blood to  
flow into the thorax and thereby increasing vital organ perfusion to enhance the circulation of  
the drug.
2. A method as in claim 1, wherein the patient is under cardiac arrest, and  
wherein the intrathoracic pressure is reduced during a decompression phase of CPR when  
performing CPR and also preventing or inhibiting respiratory gas flow into the lungs with the  
valve system.
3. A method as in claim 1, wherein the intrathoracic pressure is reduced  
by breathing in while preventing or inhibiting respiratory gas flow to the lungs with the valve  
system.
4. A method as in claim 1, wherein the intrathoracic pressure is reduced  
by stimulating the phrenic nerve to cause the respiratory and/or abdominal muscles to  
contract while preventing or inhibiting respiratory gas flow to the lungs with the valve  
system.
5. A method as in claim 1, wherein the intrathoracic pressure is reduced  
by squeezing the chest and relaxing the chest with a chest caress while preventing or  
inhibiting airflow to the lungs with the valve system.
6. A method as in claim 1, wherein the valve system is configured to  
prevent respiratory gases from entering the lungs until a threshold negative intrathoracic  
pressure in the range from about 0 cm H<sub>2</sub>O to about 40 cm H<sub>2</sub>O is exceeded.
7. A method as in claim 1, wherein the drug is administered by a process  
selected from a group consisting of intravenously, through the patient's bone, through the  
patient's airway, orally, nasally, endobronchially, rectally, and transdermally.

8. A method as in claim 1, wherein the drug is administered through a facial mask or the valve system.

9. A method as in claim 1, wherein the drugs are selected from a group consisting of glucose, sodium bicarbonate, oxygen, steroids, vasopressor drugs, anti-arrhythmic drugs, anti-seizure, anti-asthma, anesthetics, and cooling solutions to cool the brain during cardiac arrest.

10. A method as in claim 1, wherein the valve system is configured to permit respiratory gases to exit the patient's lungs, and further comprising forcing respiratory gases from the lungs and out the valve system.

11. A method as in claim 1, wherein the valve system is configured to prevent respiratory gases from exiting the patient's lungs until a positive end expiratory pressure in the range from about 0 cm H<sub>2</sub>O to about 20 cm H<sub>2</sub>O is exceeded.

12. A method as in claim 1, wherein the valve system is coupled to a facial mask that is placed over the mouth and nose, and further comprising removing the drug from a drug storage compartment of the facial mask.

13. A method as in claim 1, wherein the valve system is coupled to an inhalation device that includes the drug, and further comprising inhaling from the inhalation device to administer the drug.